



A.D. 1820 N^o 4484.

S P E C I F I C A T I O N

OF

JOHN READ.

SYRINGES.

LONDON:

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1857.



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Syringes.

READ'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JOHN READ, of the Parish of Howmonden, in the County of Kent, Gentleman, send greeting.

WHEREAS I, the said John Read, did, by my Petition, humbly represent
5 to His present most Excellent Majesty King George the Fourth that I had
invented "AN IMPROVEMENT IN SYRINGES;" and in regard that I, the said John
Read, was the first and true Inventor thereof, and that the same had not been
practised by any other person or persons to my knowledge and belief, I most
humbly prayed His said Majesty to grant unto me, my exors, admors, and
10 assigns, His Majesty's Royal Letters Patent, under the Great Seal of Great
Britain, for the sole use, benefit, and advantage of my said Invention, within
England, Wales, and the Town of Berwick-upon-Tweed, for the term of
fourteen years, pursuant to the Statute in that case made and provided;
and His said Majesty being willing to give encouragement to all arts and
15 inventions which might be for the public good, was graciously pleased to con-
descend to my request; and therefore by His Majesty's Royal Letters Patent,
bearing date at Westminster, the Eleventh day of July, in the first year of
His reign, of His special grace, certain knowledge, and mere motion, did give
and grant unto me, the said John Read, my exors, admors, and assigns, His
20 especial licence, full power, sole privilege and authority, that I, the said John
Read, my exors, admors, and assigns, and every of us, by myself and them-
selves, or by my and their deputy or deputies, servants or agents, or such others
as I, the said John Read, my exors, admors, or assigns, should at any time

Read's Improvement in Syringes.

agree with, and no others, from time to time and at all times thereafter, during the term of years therein expressed, should and lawfully might make, use, exercise, and vend my said Invention within that part of His Majesty's United Kingdom of Great Britain and Ireland called England, His Dominion of Wales, and Town of Berwick-upon-Tweed, in such manner as to me, the said John Read, my 5
 exors, admors, and assigns, or any of us, should in my or their discretion seem meet, and that I, the said John Read, my exors, admors, and assigns, should and lawfully might have and enjoy the whole profit, benefit, commodity, and advantage from time to time coming, growing, accruing, and arising by reason of the said Invention for and during the term of years therein mentioned, to 10
 have, hold, exercise, and enjoy the said licence, powers, privileges, and advantages therein-before granted or mentioned to be granted unto me, the said John Read, my exors, admors, and assigns, for and during and unto the full end and term of fourteen years from the date of the said Letters Patent next and immediately ensuing, and fully to be complete and ended, according to the 15
 Statute in such case made and provided; in which said Letters Patent is contained a proviso that if I, the said John Read, should not particularly describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand and seal, and cause the same to be inrolled in His Majesty's High Court of Chancery 20
 within two calendar months next and immediately after the date of the said Letters Patent, that then the said Letters Patent, and all liberties and advantages whatsoever thereby granted, should utterly cease, determine, and become void, anything therein contained to the contrary thereof in anywise notwithstanding, as in and by the said Letters Patent, relation being thereunto had, 25
 may more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said John Read, do hereby declare that the nature of my said Invention, and the manner in which the same is to be performed, are particularly described and ascertained by the Drawings or sections annexed to these Presents, and 30
 the following explanation thereof (that is to say):—

First, my improved syringe is for professional purposes in the removal of obstructions and constipations of the bowels, and may be applied in all cases where injection of fluid is required, and which the patient may use himself without any assistance with the greatest ease, safety, and convenience. This 35
 syringe may be made of silver, or any other metal, and in shape and form following; see section, Fig. 1. The tube A and piston B to be made nearly on the same principle as the common syringe, but the tube A is to be drawn to a true cylinder on triblets. At the bottom of the tube A is a socket

Read's Improvement in Syringes.

with two screw joints C, C, and a partition between them. In the lower part of the socket is a spherical valve, confined to its action by the above-mentioned partition, which admits the fluid to pass through the nine large holes made in it for that purpose; see Fig. 2; and at the side of the above-mentioned
5 socket, between the two screw joints, is a small branch D, D, in which there is another screw joint containing another small spherical valve, confined to its action by a wire passed through the joint at D. E is a flexible tube bound to the side branch at D, and to the ivory pipe F at the upper end. At the upper end of the tube A is a small pipe G, to admit the air in and out at every
10 motion of the piston; and if any small portion of the fluid should pass by the piston in the act of forcing, the small pipe G will convey it back into the vessel from whence it was taken. And thus the before-mentioned socket C, C, at the bottom of the tube A, and the side branch D, D, containing the three screw joints and two spherical valves, with the small pipe G at the upper end of the
15 tube A, constitute the improved syringe. The mode of using this machine is by placing the lower end of the syringe C, C, in a small vessel filled with water or any other fluid, then by raising the piston B the fluid will pass by the valve in the lower socket C, at the same time the air will pass out through the small pipe G; then by sinking the piston the air will return through the pipe
20 G, and the fluid will be forced through the side branch D, D, and flexible tube E, conducted by the ivory pipe F. Thus by raising and sinking the piston alternately, the fluid may be conveyed from the vessel it which it is deposited with the greatest ease through the flexible tube E, conducted by the ivory pipe F to any place or in any quantity required. H, a bladder, in which
25 the fluid may be applied to the end of the syringe, if in delicate cases it should be rendered necessary.

Fig. 3 is an improved syringe of much larger dimensions and longer flexible tube, and may be applied for similar purposes in the veterinary arts; but the improvement is by admitting and discharging the fluid upon the same principle
30 as Fig. 1 and Fig. 2.

Fig. 4 is an improved syringe, a most useful machine for watering pines, and all plants in conservatories and hot-houses, and for destroying insects on trees either in forcing houses or on walls, thereby answering every purpose of the barrow engine, with much greater facility and convenience. The tube A
35 and piston B of this syringe are also made nearly upon the same principle as the common syringe; but the improvement by which such power is obtained is by admitting the charge or water to charge the tube by the means of a spherical valve, inclosed in a socket at the lower end of the tube C, C, and by admitting the air to pass through the small pipe G, at the upper end of the

Read's Improvement in Syringes.

tube, upon the same principle as Fig. 1 and Fig. 3. The small pipe G will contain any portion of water that may pass by the piston in the act of forcing for the purpose of washing off small insects from vines and fruit trees on walls, and return the water again into the vessel at every motion of charging the syringe.

Fig. 5 is a plan of the rose or partition of the socket through which the water is admitted by the spherical valve through the nine large holes of the inner circle, and discharged through the smaller holes in the outer circle.

Fig. 6 is another rose, to be applied to the same screw joint as Fig. 5, and to act upon the same principle, but with smaller holes, to convey the water in form of a gentle shower or dew. Thus the fluid being admitted by the before-mentioned valves, and the air passing and repassing through the small pipe G at every motion of the piston, the action will be very easily performed; by which the three different machines will probably be found to be the best constructed, most useful, safest, and most effectual ever applied for the several purposes before specified.

In witness whereof, I have hereunto set and affixed my hand and seal, this Thirty-first day of August, in the year of our Lord One thousand eight hundred and twenty.

JOHN (L.S.) READ. 20

AND BE IT REMEMBERED, that on the Thirty-first day of August, in the year of our Lord 1820, the aforesaid John Read came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stampd according to the tenor of the Statute made for that purpose.

Inrolled the First day of September, in the year of our Lord One thousand eight hundred and twenty.

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FIG. 4.



FIG. 3.

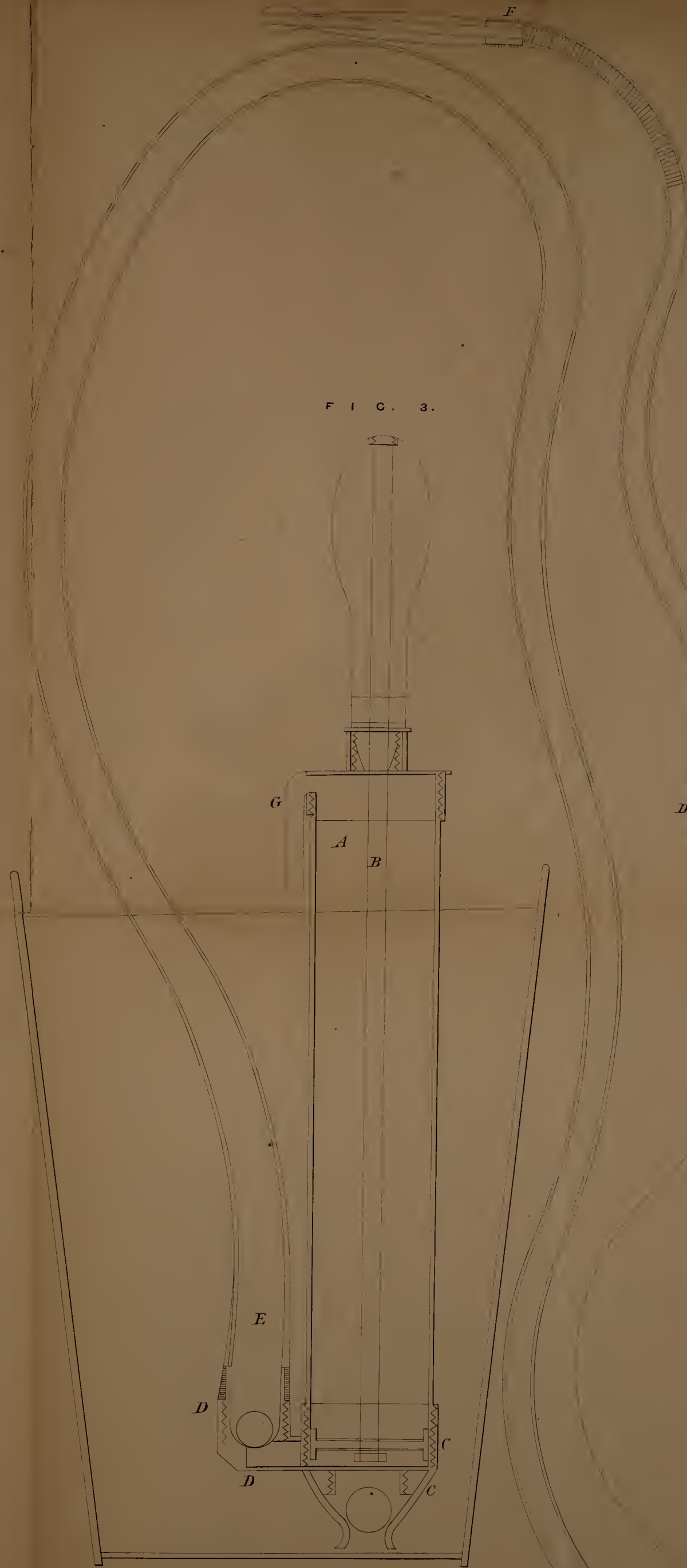


FIG. 1.

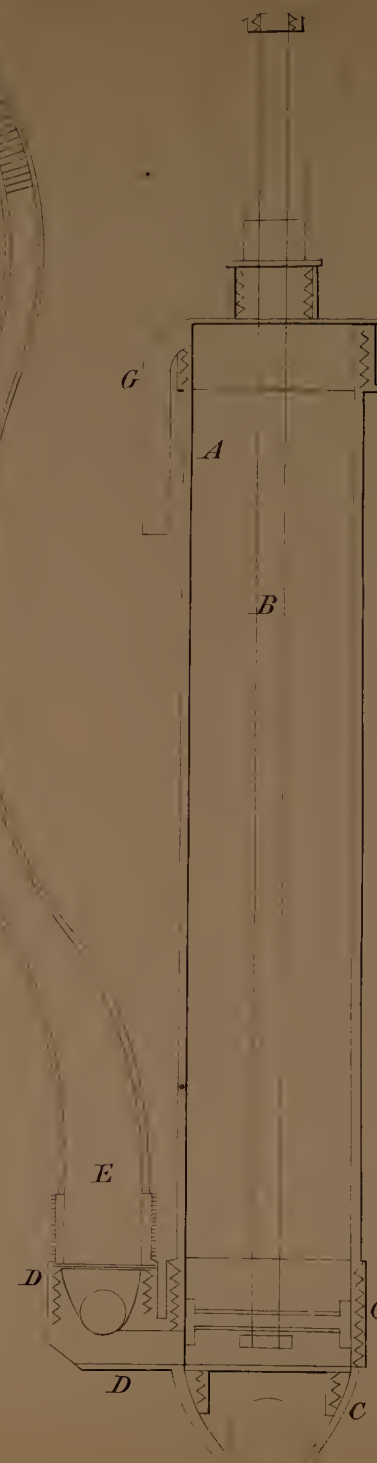


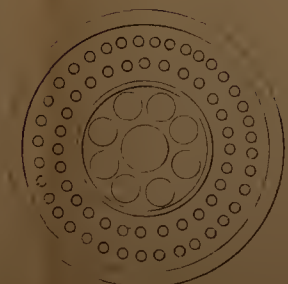
FIG. 2.



FIG. 6.



FIG. 5.



Unrelieved drawing is partly colored

